Arms Control and the Inspector

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This pamphlet is part of a series about the potential security impact of arms control inspections prepared by the Defense Treaty Inspection Readiness Program (DTIRP) to increase ***Readiness Through Awareness*** within the United States Government and government contractor community. Additional copies of this pamphlet, as well as other cost-free information about arms control treaties and agreements potentially affecting your facility and related security countermeasures, are also available from DTIRP Outreach Program personnel.

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Cover Photo: Mod 2 chemical weapons inspection exercise.

INTRODUCTION

Since 1988, the United States has been deploying inspection teams and hosting foreign inspectors as they conduct activities under three major arms control agreements—the Intermediate-Range Nuclear Forces (INF) Treaty, the Conventional Armed Forces in Europe (CFE) Treaty, and the Strategic Arms Reduction Treaty (START). The agreements focus on specific weapons systems. The majority of sites declared for inspection are military bases and installations; only a few defense contractor sites are affected. The inspector's role is to recognize, inventory, and confirm armaments and equipment identified by the treaty members in initial and periodic declarations, and to monitor destruction, elimination, or reduction activities.

Compared to these treaties, the new arms control agreements being negotiated or just entering into force are more complicated and significantly more intrusive. Emerging arms control will impact a significantly larger

number of defense contractor sites, even those not related to a weapons system, as well as private industry. Challenge-type inspections, in particular, will greatly expand the number of military and industrial facilities potentially subject to inspection. The characteristics and role of inspectors is also evolving. Inspectors will increasingly be drawn from an international inspectorate, possess greater technical specialization, receive more extensive training, and be familiar with both military and industrial technologies. They may use more sophisticated technologies to conduct their inspections, during which they may operate under a written mandate and actually negotiate inspection activities. Inspectors may also be exposed to, and obligated to safeguard, increasing levels of sensitive information.

This pamphlet addresses the changing inspection environment in general and, specifically, the evolving role of the inspector. It examines the identity of the foreign inspector, typical inspector training, inspector tools, and the objectives and goals of the inspection process.

THE EVOLVING INSPECTOR

Multilateral Agreements

The trend among current and emerging arms control agreements is toward multilateral, rather than bilateral, treaty membership and implementation. The INF and START treaties each began as bilateral agreements between the United States and the Soviet Union but became multilateral accords with the Soviet Union's successor states—Belarus, Kazakhstan, Russia, and Ukraine. Even the multilateral nature of the CFE Treaty, with more than 20 signatories, increased as national inspection teams became multinational for reasons of resources and economics. Meanwhile, the Chemical Weapons Convention (CWC) has over 160 signatories, and the Comprehensive Nuclear Test-Ban Treaty (CTBT) is open to any state seeking to join.

Awareness of this trend is important to U.S. facilities. The increasing number of U.S. treaty partners complicates the security preparation process. Under bilateral agreements, security and countermeasures

planning need only address inspectors from a single state. Multinational inspection teams, however, represent many states with a variety of military and economic interests. Facilities must take all of these interests into consideration during the security preparation process.

International Inspectors

To conduct inspection and escort operations under the early arms control agreements—INF, START, and CFE—the United States and the former Soviet Union use national organizations, the Defense Threat Reduction Agency (DTRA) and the Nuclear Risk Reduction Center (NRRC), respectively. The inspectors employed by these organizations share a common characteristic: they all work under the direction of their governments during inspection activities. They also are trained to conduct escort operations during inspections by treaty partners. This cross-training is important because inspectors who are also escorts acquire skills which expand their ability to perform each role.

The trend among the most recent arms control agreements, however, is toward

inspectors employed by an international organization. For example, the CWC is administered by the Organisation for the Prohibition of Chemical Weapons (OPCW), whose Technical Secretariat employs inspectors from CWC member countries to conduct inspection activities. Unlike previous agreements, these international civil servants receive their training, tasking, and direction during inspections from the OPCW, not their national governments. Neither the United States nor any other treaty member has any active inspection role. When inspected, however, they do employ and provide their own escorts.

Increasing Specialization

Under the INF, START, and CFE treaties, the United States and the former Soviet Union select and use inspectors based largely upon their relevant expertise, skills, and knowledge of the treaty-limited activities, equipment, or armaments. When a particular treaty calls for missile expertise, for instance, DTRA relies on military personnel with various ground-based missile system backgrounds. In almost all cases, DTRA inspection team chiefs are military officers with both Russian language skills

and some practical experience, having worked as subject matter experts on the Warsaw Pact and former Soviet Union. The Russian NRRC exercises a similar selection process for its inspectors, who appear to have analogous missile expertise when necessary, although few of their team chiefs speak English.

As inspectors increasingly become employees of international organizations in support of large multinational treaties, however, the required skill set is expanding. Under the CWC, all member states were solicited to recruit and nominate inspector candidates with specialized technical backgrounds, including chemical weapons and munitions specialists, chemical production technologists, analytical chemists, chemical production logisticians, medical specialists, paramedics, and technicians. Additionally, all inspectors must have fluency in English and a good working knowledge of one of the five other official languages of the United Nations. The selection criteria includes education, experience, language skills, a university degree in chemistry or chemical engineering,

and 6 years professional experience in related specialized fields. Previously, only the Threshold Test Ban Treaty's (TTBT) limited implementation activity required inspectors with such skills.

Familiarization with Industry

The changing arms control environment will also require inspectors familiar with applicable industrial technologies. The majority of INF, START, and CFE inspectors go to military deployment, storage, training, maintenance, elimination, or reduction sites; only a few defense contractor production sites are affected (under INF and START). In contrast, the CWC, the projected protocol under negotiation for the Biological Weapons Convention, and the Comprehensive Nuclear Test-Ban Treaty (CTBT) could subject defense *and* non-defense industrial sites to inspection. Consequently, inspectors will likely be drawn from the international ranks of those states engaging in industrial production. They will probably be peers or contemporaries, and even previous competitors, of many sites they inspect.

Expanded Training

The new and emerging agreements will also require expanded training for international inspectors. Initial inspector training for the INF Treaty consisted of formal courses, lasting 1 to 3 weeks, focusing on the treaty text, items of equipment and armaments subject to the treaty, inspection and elimination protocols, and verification methodologies. Additional team training and mock inspection exercises of U.S.-declared facilities rounded out the initial training activities. Since then, training has expanded to include a series of structured, treaty-related modules and continuous individual and team activities to develop, refine, and maintain inspection skills. Experience with INF, START, and CFE foreign inspectors indicates their training is similar to U.S. inspector training.

In contrast, primary training for the international inspectors will typically be longer and more comprehensive. For example, the OPCW views the chemical inspection process as potentially complicated and sensitive with respect to confidential information. The OPCW Technical Secretariat inspectors receive 20

weeks of structured training in basic treaty subjects and specialized skills followed by field training exercises similar to mock inspections. Seven of the 20 weeks cover the CWC, the OPCW, inspections, the chemical industry, and protection from and destruction of chemical weapons. Ten more weeks are invested in each individual's area of specialization to hone inspection skills. The final phase of training focuses on realistic exercises at chemical weapons production, storage, and destruction facilities, and at chemical industry facilities with Schedule 1, 2, and 3 chemicals.

Enhanced Technology

New environments and technologies mean inspectors must use increasingly technical equipment. When INF, START, and CFE treaty inspections began, inspection equipment did not involve sophisticated technology. For example, INF inspectors have from the beginning used tape measures, scales, and Polaroid cameras. But by the end of the first 3-year inspection period, U.S. INF inspectors had begun to use radiation detection equipment to distinguish SS-25 missiles from SS-20 missiles in canisters by measuring warhead emissions. Under the

CFE Treaty, inspectors may use tape measures, portable passive night vision devices, binoculars, video and still cameras, dictaphones, flashlights, magnetic compasses, and lap-top computers. The START inspectors may use the same INF equipment with the addition of global positioning system (GPS) receivers.

Clearly, inspectors have gained significantly better information collection and recording tools to implement verification regimes. Even so, for the few production sites declared under INF and START, observation remains the primary tool inspectors use for monitoring. In sum, technology, although increasing in use, is not a major element of on-site inspection activities for these agreements.

On the other hand, the CWC, the CTBT, and other emerging agreements not only lend themselves to the greater application of verification technology, but are more dependent on technology to provide information necessary for verification activities. For example, international CWC inspection teams are equipped with

communications, administration, safety, first aid, chemical agent detection, and decontamination equipment.

The CWC inspection equipment includes all the equipment associated with INF and START, as well as transportable satellite communications, binoculars, chemical agent detectors and monitors, gas chromatography/mass spectrometers, individual chemical protective equipment, and computers. Non-destructive or non-damaging evaluation (NDE) equipment such as neutron interrogation systems, ultrasonic pulse echo systems, and acoustic resonance spectroscopy are also used to determine munitions and bulk storage fill safely and quickly.

To some degree, the change in the inspection environment dictates greater reliance on equipment and technology because the chemical, biological, or nuclear environment can impact both inspector safety and data collection methodologies. Additionally, the trend toward use of more sophisticated technology during inspection activities increases demands on the inspectors who

will use the equipment. The use of this more complex equipment in both industrial and non-industrial environments also will place more pressure on sites and escorts concerned with ensuring the safe use of equipment and the protection of national security or other critical information.

Inspection Mandate

Under all agreements, every inspection team has an inspection mandate, and each inspector's role is to assist in fulfilling it. But emerging agreements may equip inspectors with a new tool: a written inspection mandate. Under the earlier agreements, inspection mandates have been oral mission statements describing the nature of inspection activities according to treaty verification or inspection protocols. When questions or issues have arisen, all parties turn to the applicable treaty for guidance. The OPCW Technical Secretariat inspectors, however, are guided by a written inspection mandate spelling out what they must accomplish during the inspection. Using this mandate, inspectors leverage access sufficient to collect information to support a treaty compliance judgment. In practice, the inspection mandate now

parallels the CWC as a governing directive for inspection activities. Inspectors may choose in some instances to follow the letter of the mandate instead of the Convention, complicating facility preparation.

Inspector Preparation

Arms control inspectors begin to prepare for an inspection by reviewing the known facts—for a declared site, the declarations provided by the treaty partners, the site diagrams already exchanged, the total national declarations, and the nature and description of treaty-limited or monitored equipment or armaments. For current multilateral agreements, such as INF, START, and CFE, the inspector's task is eased slightly because he or she must deal with only one country's declarations, and in the case of CFE, only two different suites of equipment (NATO and former Warsaw Pact). Regardless, the inspector's role and mission objective is primarily to inventory holdings and observe non-activity associated with the closed-out status of formerly declared sites.

In contrast, the CWC has more than 160 signatories, many of whose activities will

be subject to reporting and declaration. The site's actual declaration will determine the nature of the inspection activity and, thus, the amount of preparation. For example, at a declared chemical weapons storage facility, inspectors must become acquainted with the declared chemical munitions located there. Thus, inspectors must review the characteristics of the chemical munitions as well as the stockpile at the inspection location. If the site is a declared scheduled chemical facility, the type of facility and the schedule of chemicals will impact both the inspector's preparation and needed skills.

During initial inspections of chemical weapons and Schedule 1 and 2 facilities, the inspectors must be prepared to negotiate a draft facility agreement. This draft agreement outlines procedures to be followed for all subsequent systematic inspections. The degree of access, any sampling, the type of documentation, and the personnel who would be available for interviews must be negotiated and mutually agreed upon, subject to final negotiation between the State Party and the OPCW. This negotiation role differs from INF, CFE, and

START declared site inspections during which inspectors have little or no requirement to negotiate inspection activities.

Confidentiality

Finally, under emerging agreements, negotiators increasingly recognize the need to protect information provided in data declarations and collected during on-site inspection activities. As a result, treaty provisions require the inspector to respect and protect information designated by the inspected party as confidential. If provided or obtained information is considered confidential by the site, the inspectors and other members of the staff with access to the information are obligated to safeguard it.

In order to ensure the strictest protection of such information, the CWC obligates each staff member to enter into individual secrecy agreements during OPCW employment and for 5 years afterwards. Inspectors and other members of the staff are prohibited from communicating information they have gained in connection with their activities to any state, organization, or person outside the OPCW's Technical Secretariat.

THE QUINTESSENTIAL INSPECTOR

For all inspections, whether occurring under current or emerging agreements, once the inspection team arrives at the site, the inspector's primary role is to collect and confirm treaty-relevant information. The purpose could be to confirm declared data or collect information related to the site's adherence to the arms control agreement. Upon completion, the data will be included in an inspection report and used to support a compliance judgment.

Inspectors will collect facts through access to the site or treaty-limited items, equipment, and/or items of inspection. In doing so, they will exercise the full range of treaty-authorized inspector rights to collect treaty-related information necessary for verification purposes.

Inspectors also understand the inspected party's right to protect non-treaty information. However, they may request the site to demonstrate protected information or

assets are not related to the treaty or the inspection mandate.

CONCLUSION

The role inspectors fulfill continues to be very dynamic. Since 1988, when inspectors were first granted unprecedented access to missile operating bases, training areas, storage sites, and production facilities by the United States and former Soviet Union, bilateral and multilateral agreements have given way to international agreements, such as the CWC involving inspectors from more than 160 member nations. Moreover, each succeeding agreement since 1988 has provided for additional inspection procedures and increased use of technology to collect information to support a verification determination.

Emerging international agreements can be characterized as increasingly complex with an expanding scope of inspection procedures and technology. Inspector training, skills, and expertise are expected to continue evolving to keep pace. The bilateral era brought straightforward tasks and

objectives, such as verifying declared inventory, and monitoring destruction and elimination activities. Emerging agreements require inspectors with increased skills as well as military and industrial expertise to understand complex industrial processes, review technical documentation, interview personnel, and negotiate access and inspection activities on the spot.

Knowledge of emerging arms control agreements, their verification provisions, inspector activities and how to best demonstrate compliance under each agreement will be crucial to stay abreast of new challenges to security management. You can obtain additional information about arms control treaties and agreements potentially affecting your facility and related security countermeasures by contacting DTIRP Outreach Program personnel at 1-800-419-2899, your local Defense Security Service (DSS) Industrial Security Representative, or your government sponsor.

OTHER RELATED MATERIALS

Order No.	Title
402A	Arms Control Inspections—*Are You Ready?*
403V	Arms Control Treaties and Their Impact on U.S. Facilities
404B	Treaty Inspection Notifications
405B	Arms Control Agreements Affecting DoD Industry
407X	Arms Control Treaties Information on CD-ROM
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NOTES

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